

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

HITACHI CONSUMER ELECTRONICS CO.,  
LTD., and HITACHI ADVANCED DIGITAL,  
INC.,

Plaintiffs,

v.

TOP VICTORY ELECTRONICS  
(TAIWAN)CO. LTD., TPV INT'L (USA), INC.,  
ENVISION PERIPHERALS, INC., TOP  
VICTORY ELECTRONICS (FUJIAN) CO.  
LTD., TPV ELECTRONICS (FUJIAN) CO.  
LTD., and TPV TECHNOLOGY LTD.,

Defendants.

CIVIL ACTION NO. 2:10-CV-260-JRG

JURY

**HITACHI'S MOTION FOR JUDGMENT AS A MATTER OF LAW  
PURSUANT TO RULE 50(B) THAT THE '310 AND '375 PATENTS ARE  
INFRINGEMENT OR ALTERNATIVELY FOR A NEW TRIAL PURSUANT TO RULE 59(A)**

## TABLE OF CONTENTS

	Page
I. INTRODUCTION .....	1
II. LEGAL STANDARDS .....	2
III. FACTUAL BACKGROUND .....	3
IV. ARGUMENT .....	4
A. The Trial Evidence Overwhelmingly Proves Infringement.....	4
B. TPV's Expert Admitted That The Accused TVs Possessed The Claimed Structural Elements .....	7
C. TPV's Non-Infringement Arguments Were Legally Deficient and Irrelevant .....	8
1. Claim 7 of the '310 Patent .....	8
2. Claims 26 and 30 of the '375 Patent.....	12
D. TPV's Relied On Irrelevant Arguments Designed To Confuse The Jury .....	14
V. CONCLUSION.....	15

## TABLE OF AUTHORITIES

### CASES

<i>Amstar Corp. v. Envirotech Corp.</i> , 730 F.2d 1476 (Fed. Cir. 1984) .....	16
<i>Function Media, LLC v. Google, Inc.</i> , Civ. No. 2:07-279, 2011 U.S. Dist. LEXIS 101998, at **6–9 (E.D. Tex. Sep. 9, 2011) .....	3
<i>Hiltgen v. Sumrall</i> , 47 F.3d 695 (5th Cir. 1995) .....	3
<i>Minn. Mining &amp; Mfg. Co. v. Chemque, Inc.</i> , 303 F.3d 1294 (Fed. Cir. 2002) .....	3
<i>Smith v. Transworld Drilling Co.</i> , 773 F.2d 610 (5th Cir. 1985) .....	3
<i>Uniroyal, Inc. v. Rudkin-Wiley Corp.</i> , 837 F.2d 1044 (Fed. Cir. 1988) .....	11
<i>Verdegaal Brothers v. Union oil Co. of Cal.</i> , 814 F.2d 628, n.5 (Fed. Cir. 1987) .....	17
<i>Vivid Tech., Inc. v. American Science &amp; Eng., Inc.</i> , 200 F.3d 795 (Fed. Cir. 1999) .....	11

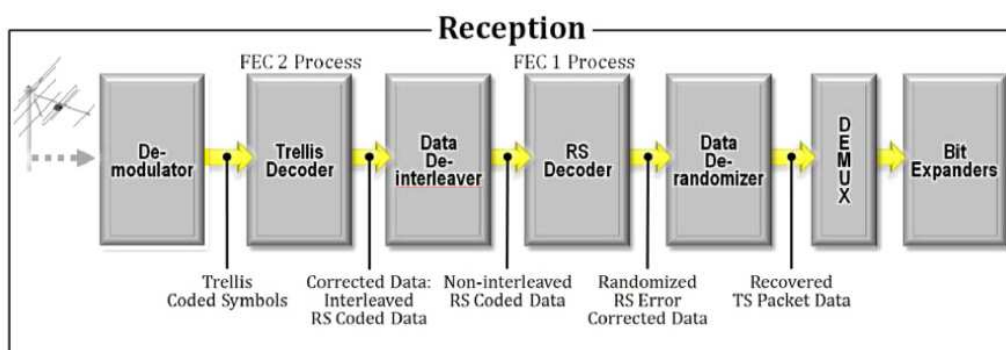
### RULES

Fed. R. Civ. P. 50 .....	1, 2
Fed. R. Civ. P. 59 .....	1, 3

Plaintiffs Hitachi Consumer Electronics and Hitachi Advanced Digital, Inc. (collectively, “Hitachi”) respectfully renews its request that the Court enter judgment as a matter of law (“JMOL”) pursuant to Fed. R. Civ. P. 50(b) that Top Victory Electronics (Taiwan) Co. Ltd., TPV Int’l (USA), Inc., Envision Peripherals, Inc., Top Victory Electronics (Fujian) Co. Ltd., TPV Electronics (Fujian) Co. Ltd., and TPV Technology Ltd. (collectively, “TPV”) infringe claim 7 of U.S. Patent No. 7,286,310 (“the ‘310 Patent”) and claims 26 and 30 of U.S. Patent No. 8,009,375 (“the ‘375 Patent”). Alternatively, Hitachi requests a new trial on this issue in accordance with Federal Rule of Civil Procedure 59(a).

## I. INTRODUCTION

There was no dispute at trial that the accused ATSC televisions (“TVs”) include all of the structural elements of the asserted claims, namely, a receiver, demodulator, error corrector, and video/audio expanders. Nevertheless, Mr. Wechselberger manufactured a non-infringement argument predicated on the fact that the accused products included additional circuits other than those recited in the asserted claims. For instance, Mr. Wechselberger testified that the expanders did not expand “the digital signal corrected by the error corrector,” as recited in claim 7 of the ‘310 Patent, because the signal input to the expander was allegedly a different signal due to the presence of additional unclaimed signal processing elements such as a derandomizer located between the [trellis] error corrector and the expander in the accused TVs. Mr. Wechselberger used the following demonstrative to illustrate:



This non-infringement argument ignored the fact that the asserted claims are open-ended “comprising” claims, for which the addition of unclaimed elements does not avoid infringement. Indeed, the Court instructed the jury that “comprising” claims are infringed “even if the accused product includes components in addition to those requirements.” 4/12/2013 P.M. Trial Tr. at 30:4-31:12. Thus, Mr. Wechselberger’s non-infringement argument was contrary to the Court’s construction.

Moreover, Mr. Wechselberger’s argument was nonsensical and contradicted by the fact that: (1) he never identified any signal input to the TV other than the one received by the antenna; (2) he admitted that the received signal includes video and audio information and that this information continues to be represented in the signal after each stage of processing until it is input to the expanders, which is all that the claim language requires; and (3) both Mr. Wechselberger and the Court have referred to “the signal” and “the same signal,” respectively, when discussing the signal processing steps in the accused TVs, thereby demonstrating that there is only one signal being processed by the various circuit elements.

In view of the foregoing, no reasonable jury could have concluded that there was no infringement based upon the argument presented by Mr. Wechselberger and therefore JMOL should be granted. Alternatively, the jury’s non-infringement verdict was plainly against the weight of the evidence and Hitachi should be granted a new trial.

## **II. LEGAL STANDARDS**

Judgment as a matter of law is appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a). *See also Hiltgen v. Sumrall*, 47 F.3d 695, 700 (5th Cir. 1995). If substantial evidence does not support the jury’s verdict, the district court must grant judgment as a matter of law. *See, e.g., Minn. Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1305–07 (Fed. Cir. 2002) (district

court erred in denying plaintiff's motion for JMOL because substantial evidence did not support jury's verdict of anticipation and that there was no inducement of infringement). Courts in this district will grant JMOL in patent cases in appropriate circumstances. *See, e.g., Function Media, LLC v. Google, Inc.*, Civ. No. 2:07-279, 2011 U.S. Dist. LEXIS 101998, at \*\*6–9 (E.D. Tex. Sep. 9, 2011) (granting in part patentee's motion for JMOL of validity).

Pursuant to Rule 59(a), “[a] new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985).

### **III. FACTUAL BACKGROUND**

At trial, Hitachi accused 242 models of TVs of infringing claim 7 of the ‘310 Patent (PTX-0002) and claims 26 and 30 of the ‘375 Patent (PTX-0003). These accused TVs are listed in JTX-001. All TVs sold in the U.S. since 2007 are required by the FCC to be capable of receiving signals broadcast in accordance with the ATSC A/53 standard. Indeed, all of the accused TVs are configured to receive and display signals broadcast in accordance with the ATSC Standard. *See* 4/9/2013 A.M. Trial Tr. at 97:9-99:2; PTX-0264. *See also* 4/11/2013 P.M. Trial Tr. at 70:5-7. TPV admitted that it imported the accused TVs into the U.S. or sold them to customers who it believed imported them into the U.S. 4/12/2013 A.M. Trial Tr. at 21:17-21.

TV signals broadcast in accordance with the ATSC digital TV standard include digital video information compressed using the MPEG-2 video compression standard and digital audio information compressed using the AC-3 audio compression standard. PTX-0264 at HCE-TPV00002722 (ATSC based upon MPEG-2 and AC-3 standards). The ATSC broadcast signal also includes two different kinds of error correction signals. The first are Reed-Solomon codes, and the second are Trellis codes. *See, e.g.,* PTX-0264 at HCE-TPV00002750 (“Main channel

error protection consists of a concatenated RS encoding, interleaving and 4-state trellis encoding . . . .”) (emphasis added); *id.* at Fig. 6.1, HCE-TPV00002747 (depicting Reed-Solomon and Trellis encoders). The video, audio, and error correction information are 8VSB modulated onto a carrier frequency. PTX-0264 at HCE-TPV00002779. Both Mr. Hamilton and TPV’s expert, Mr. Wechselberger, agreed that a digital ATSC TV must include circuits to reverse the foregoing compression, error protection, and modulation steps performed at the transmitter. 4/9/2013 A.M. Trial Tr. at 115:5-14; 4/11/2013 A.M. Trial Tr. at 95:17-97:11.

In general, the asserted claims of the ‘310 and ‘375 Patents encompass an apparatus comprising a receiver, a demodulator, an error corrector, a first expander for digital video information, and a second expander for digital audio information. One difference between claim 7 of the ‘310 Patent and claims 26 and 30 of the ‘375 Patent is that in claim 7 an “error correction signal” must be “commonly” added to both the video and audio signals. Conversely, claims 26 and 30 of the ‘375 Patent require that “error correction information” be “separately” added to the video and audio information. Hitachi accused the Trellis codes of meeting the first error correction signal requirement and the Reed-Solomon codes of meeting the second. The only difference between claims 26 and 30 of the ‘375 Patent is that claim 30 makes clear that the error corrector need only operate on information “previously” demodulated and, similarly, that the expanders need only operate on digital information “previously” error corrected.

#### **IV. ARGUMENT**

##### **A. The Trial Evidence Overwhelmingly Proves Infringement**

Hitachi proved that the accused ATSC TVs possessed each and every claim element. This is unambiguously demonstrated by the ATSC standards as well technical documentation for

the accused TVs.<sup>1</sup> For convenience, a summary of the infringement evidence is presented below in table form for exemplary claim 7 of the '310 Patent.

6. An apparatus for processing a transmitted digital signal including at least one of a video signal and an audio signal, comprising:	<ul style="list-style-type: none"> <li>4/9/2013 A.M. Trial Tr. at 106:9-24</li> </ul>
a receiver which receives the transmitted digital signal,	<ul style="list-style-type: none"> <li>4/9/2013 A.M. Trial Tr. at 106:25-109:16 (accused TVs include a "Tuner" circuit)</li> <li>PTX-0610 at TPV-10-260-0010588 (block diagram depicting "Tuner")</li> </ul>
wherein the transmitted digital signal includes a video signal bit-compressed by a first compression method,	<ul style="list-style-type: none"> <li>4/9/2013 A.M. Trial Tr. at 110:4-111:17</li> <li>PTX-0264 at HCE-TPV00002722 (ATSC digital TV standard is based upon MPEG-2 video standard); <i>id.</i> at HCE-TPV00002732-33 (describing 50:1 video bit rate reduction, Fig. 5.1 depicting video compression block)</li> </ul>
an audio signal bit-compressed by a second compression method, and	<ul style="list-style-type: none"> <li>4/9/2013 A.M. Trial Tr. at 110:4-111:17</li> <li>PTX-0264 at HCE-TPV00002722 (ATSC digital TV standard is based upon AC-3 audio compression standard); <i>id.</i> at HCE-TPV00002733 (Fig. 5.1 depicting audio compression block)</li> </ul>
an error correction signal added commonly to both the video signal and the audio signal;	<ul style="list-style-type: none"> <li>PTX-0264 at HCE-TPV00002750 ("Main channel error protection consists of . . . trellis encoding . . ."); <i>id.</i> at HCE-TPV00002747 (Fig. 6.1 showing Trellis Encoder)</li> <li>4/9/2013 A.M. Trial Tr. at 111:23-113:22 (trellis bit <math>Z_0</math> is calculated and added commonly across video and audio bits circulating in delay loop of PTX-0264 at Fig. 6.8, HCE-TPV00002754)</li> <li>4/9/2013 P.M. Trial Tr. at 77:2-25 (explaining on cross that <math>Z_0</math> is calculated across a long history of audio and video bits that have influenced the values stored in the delay elements of the feedback loop in Fig. 6.8)</li> </ul>
a demodulator which demodulates the digital signal received by the receiver;	<ul style="list-style-type: none"> <li>4/9/2013 A.M. Trial Tr. at 114:4-116:9</li> <li>PTX-1019 at BROADCOM_021449 (SOC databook depicting "VSB/QAM Demod" block)</li> <li>PTX-1061 at MTK-10-260-0001547 (depicting and</li> </ul>

<sup>1</sup> Mr. Hamilton explained that the technical documents he relied upon at trial were representative of all the accused products. *See, e.g.*, 4/9/2013 A.M. Trial Tr. at 103:16-104:10, 118:18-21; 4/9/2013 P.M. Trial Tr. at 6:18-22; 8:18-22; 10:4-8. This was unrebutted by TPV.



	describing “demodulator”)
an error corrector which corrects an error of the digital signal demodulated by the demodulator based on the error correction signal;	<ul style="list-style-type: none"> <li>• 4/9/2013 A.M. Trial Tr. at 116:23-118:17</li> <li>• PTX-1021 at BROADCOM_030089-90 (Figure 26 depicting forward error correction (“FEC”) block which “performs ... trellis ... decoding”)</li> </ul>
a first expander which bit-expands the video signal of the digital signal corrected by the error corrector in accordance with the first compression method; and	<ul style="list-style-type: none"> <li>• 4/9/2013 A.M. Trial Tr. at 119:5-121:16</li> <li>• PTX-1019 at BROADCOM_021449 (depicting MPEG video decoder); <i>id.</i> at BROADCOM_021475 (describing MPEG-2 video decoder); <i>id.</i> at BROADCOM_021477 (depicting MPEG-2 video decoder)</li> <li>• PTX-0942 at ZOR000008 (depicting and describing MPEG2 Decode Unit)</li> </ul>
a second expander which bit-expands the audio signal of the digital signal corrected by the error corrector in accordance with the second compression method.	<ul style="list-style-type: none"> <li>• 4/9/2013 A.M. Trial Tr. at 121:21-122:22</li> <li>• PTX-1019 at BROADCOM_021477 (depicting AC3 audio decoder block).</li> </ul>
7. The apparatus according to claim 6, wherein the first compression method utilizes a discrete cosine transform.	<ul style="list-style-type: none"> <li>• 4/9/2013 A.M. Trial Tr. at 123:7-125:11 (explaining that ATSC standard employs MPEG-2 video standard, which in turn uses discrete cosine transforms)</li> <li>• PTX-0947 at HCE-TPV00004894 (MPEG-2 standard describing use of DCT)</li> </ul>

With respect to claims 26 and 30 of the ‘375 Patent, Mr. Hamilton explained how Reed-Solomon error correction information is added “separately” to the video and audio information. *See* 4/9/2013 A.M. Trial Tr. at 128:10-130:22 (Reed-Solomon codes are added separately to each data packet, which consists of only video or audio). *See also* PTX-0264 at HCE-TPV00002746-47, 50 (§ 6.1, FIG. 6.1, § 6.4). He also testified that the accused TVs include Reed-Solomon error correctors. 4/9/2013 A.M. Trial Tr. at 131:18-132:19. This testimony was unrebutted.

Claims 26 and 30 further require that the received digital information be “transmitted in electric wave form from a transmission path.” Mr. Hamilton explained that the accused TVs receive over-the-air electric waves that traverse the path between the broadcast and the receiving antennas. 4/9/2013 A.M. Trial Tr. at 126:19-127:14. This testimony was unrebutted.

The asserted claims of the '375 Patent also require that the error corrector correct errors that occur in the "transmission path having no recording process of the digital information therein." Mr. Hamilton explained that this is the purpose of the error correctors in the accused TVs and there is no recording process in the transmission path. *Id.* at 133:9-134:14. *See also* PTX-1027 at HCE-TPV0090040 (ATSC A/74 standard, indicating that the FEC is intended to correct error caused by "transmission impairments"). This testimony was unrebutted.

In view of the foregoing, Mr. Hamilton presented an unassailable infringement case that all elements of the asserted claims were met by the accused ATSC TVs.

**B. TPV's Expert Admitted That The Accused TVs Possessed The Claimed Structural Elements**

Mr. Wechselberger, admitted that the accused TVs include the circuits required by the asserted patent claims. For example, he admitted that the accused TVs include both a reception and demodulation circuit. 4/11/2013 P.M. Trial Tr. at 65:3-21, 68:4-6. With regard to the error corrector of claim 7 of the '310 Patent, Mr. Wechselberger admitted that the accused TVs include trellis decoders that are used to perform error correction. *Id.* at 69:14-25. With respect to the error corrector of claims 26 and 30 of the '375 Patent, he conceded that accused ATSC TVs include Reed-Solomon decoding circuits, which are understood to be part of the error correction process. *Id.* at 68:23-69:13. Mr. Wechselberger further admitted that the accused TVs included MPEG-2 video and AC-3 audio decoders, and that the term "decoder" means "expander" or a circuit that performs "decompression." *Id.* at 70:1-18.

Mr. Wechselberger also agreed with Mr. Hamilton that the order of the foregoing circuits in a digital TV would be: reception, demodulation, error correction, and then video/audio bit expansion. *Id.* at 70:19-25. In view of the foregoing, Mr. Wechselberger admitted that all the claimed structural elements were present in the accused ATSC digital TVs, effectively conceding

infringement under a proper analysis.

**C. TPV's Non-Infringement Arguments Were Legally Deficient and Irrelevant**

The non-infringement arguments advanced by Mr. Wechselberger at trial were legally flawed and have no basis in the claim language or the Court's claim constructions.

**1. Claim 7 of the '310 Patent**

For claim 7, Mr. Wechselberger testified the accused products lack three limitations: (1) "an error correction signal added commonly to both the video signal and the audio signal;" (2) "a first bit-expander which bit-expands the video signal of the digital signal corrected by the error corrector in accordance with the first compression method;" and (3) "a second expander which bit-expands the audio signal of the digital signal corrected by the error corrector in accordance with the second compression method." 4/11/2013 A.M. Trial Tr. at 115, 118, and 121-22.

With respect to the "error correction signal added commonly to both the video signal and the audio signal" requirement, Mr. Wechselberger admitted that the ATSC signals include trellis encoding, wherein every two bits are converted into three bits to add error correction information to the transmitted signal. 4/11/2013 A.M. Trial Tr. at 93:8-94:13, 100:4-16. He further admitted that the accused products include trellis decoders to "perform error correction." 4/11/2013 P.M. Trial Tr. at 69:14-25. No particular argument was made that the trellis codes were not "commonly" added to both the video and audio and thus he provided no rebuttal to Mr. Hamilton on this point.

Instead, Mr. Wechselberger's argument that this limitation is not satisfied is predicated entirely on claim language that does not exist. More particularly, Mr. Wechselberger testified:

[J]umping over to the ATSC standard, again focusing on the transmit side first, which is where the parity – where the parity information happens for trellis encoding, there is a trellis encoder. And as I talked about when I drew on the – on the easel over there earlier, parity encoding is – does not generate – I'm sorry – trellis encoding does not

generate a **parity** signal. It does not add a **parity** signal to the signal that's been transmitted. **The claim says parity is added.** The name of the game is the claims. That doesn't happen here. No error correction signal is commonly added.

4/11/2013 A.M. Trial Tr. at 117:4-16 (emphasis added). However, claim 7 never mentions the term "parity." PTX-0002. Thus, Mr. Wechselberger is contradicted by both the claim language and his own mandate that "the name of the game is the claims." Further, TPV never sought a construction, and the jury was never instructed, that the "error correction signal" was limited to "parity."<sup>2</sup> Mr. Wechselberger admitted that the trellis encoding was applied to the transmitted signal for error correction, he failed to dispute that it was "added commonly" to the video and audio, and he admitted the accused products include trellis decoders to make use of the error correction signal. Thus, there was no basis for a reasonable jury to conclude that this limitation was not met.

Turning to the video and audio bit-expander limitations of claim 7, Mr. Wechselberger's non-infringement argument was that the video and audio bit-expander limitations were not met because there were additional intervening circuits between the bit-expanders and the accused error corrector (*i.e.*, trellis decoder). More particularly, Mr. Wechselberger opined that:

Well, look at the TPV televisions, and the trellis decoder is shown here. You see the blue highlight around it. And the bit-expander is way over here. And so I brought attention to this fact that although the claim says you must bit-expand the signal that – the output from the error corrector, which in this case is the accused trellis decoder. That doesn't happen. **There's several signal processing blocks that stand between the output of the trellis decoder and the bit-expander.**

4/11/2013 A.M. Trial Tr. at 118:11-22 (emphasis added). He then testified that the additional processing blocks in the accused products between the trellis decoder and the bit expanders were

---

<sup>2</sup> In contrast, the claims in the related '769 Patent recited "parity." Plies Decl. Exh. 1 at claims 1, 5, & 8.

the deinterleaver, Reed-Solomon decoder, derandomizer, and de-multiplexer. *Id.* at 119:9-12.

Mr. Wechselberger's non-infringement argument is contrary to the Court's claim construction and hornbook patent law, since it is predicated on the notion that additional elements (deinterleaver, RS decoder, derandomizer, demultiplexer) in the accused TVs prevent infringement. However, additional unclaimed elements does not avoid infringement, especially where, as here, the asserted claims are open-ended "comprising" claims. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1057 (Fed. Cir. 1988) ("Adding features to an accused device will not result in noninfringement if all the limitations in the claims, or equivalents thereof, are present in the accused device."); *Vivid Tech., Inc. v. Am. Science & Eng., Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999) ("'[C]omprising' implements the general rule that absent some special circumstance or estoppel which excludes the additional factor, infringement is not avoided by the presence of elements or steps in addition to those specifically recited in the claim."). Similarly, the Court instructed the jury that infringement of "comprising" claims is not avoided by the addition of unclaimed elements. 4/12/2013 A.M. Trial Tr. at 31:1-12.

To provide cover for his legally deficient analysis, Mr. Wechselberger attempted to recast his opinion as one in which the claimed "signal" does not exist because the signal output from the error corrector (*i.e.*, trellis decoder) is purportedly not the same one that enters the bit-expanders, because it has undergone additional processing by unclaimed circuit elements.

Every one of these signal processing blocks processed that signal. They're there for a reason. This signal in the middle is not the same signal as that one that went in; contrastly this one changes again; this one changes again. So bottom line is, what's being bit-expanded is not the same signal, and I think I highlighted that . . . the signal that's being bit-expanded is not the same signal that is being error corrected.

4/11/2013 A.M. Trial Tr. at 118:22-119:18. However, as shown by his own demonstrative, there is only one signal being serially processed by the claimed and unclaimed circuit elements. Mr.

Wechselberger never identifies any other signal that is received by the TV and ultimately input to the expanders. Further, Mr. Wechselberger admitted that the signal input to the expanders includes the video and audio information received at the antenna. 4/11/2013 P.M. Trial Tr. at 63:5-18 (received ATSC signal includes video and audio); *id.* at 64:17-25 (signals include representation of the video and audio at each step in signal processing chain).

Moreover, claim 7 defines the received “digital signal” as including a video signal, an audio signal, and an error correction signal, and then recites that the expanders merely need to expand the video signal and audio signal portions of “the digital signal.” PTX-0002. Since there is no dispute that the accused TVs receive a signal containing video and audio and that these are eventually expanded, there is no basis in the claim for Mr. Wechselberger’s contention that the signal input to the expanders is different than the one that has been received and error corrected.

Indeed, elsewhere Mr. Wechselberger himself refers to “*the* signal” as undergoing various stages of signal processing, as opposed to there being different signals after each processing step. *See, e.g.*, 4/11/2013 A.M. Trial Tr. at 90:13-16 (“The opposite order happens at the receiver, demodulation. *The signal* is cleaned up after transmission, the streams are separated, and then the video and audio information is separately processed.”) (emphasis added); *id.* at 95:24-96:3 (“Each one of these steps changes *the signal*, does something to *it*.”) (emphasis added); *id.* at 97:18-21 (“That is the first stage that the – that *the signal* hits when it reaches – comes out of the television into the television tuner. It goes to the demodulator.”). Similarly, the Court itself noted in its claim construction Order that while a received TV signal undergoes multiple error correction and coding steps, these multiple steps of signal processing are nevertheless applied to “the same signal.” D.I. 170 at 12.

In effect, Mr. Wechselberger’s argument is that the bit-expanders must be *directly*

connected to the output of the error corrector without any unclaimed intervening elements that would allegedly create entirely new signals. However, there is nothing in the claims about the structural elements having to be “directly” connected to one another. Thus, Mr. Wechselberger’s opinion remains predicated on the fact that additional elements and processing steps exist in the accused TVs, which is an improper basis to find non-infringement.

## **2. Claims 26 and 30 of the ‘375 Patent**

With respect to claims 26 and 30 of the ‘375 Patent, Mr. Wechselberger alleged that the accused TVs did not meet the following three limitations: (1) “an error corrector configured to correct an error of the digital information demodulated by the demodulator based on the error correction information;” (2) a first expander for video information; and (3) a second expander for audio information. 4/11/2013 A.M. Trial Tr. at 126; 4/11/2013 P.M. Trial Tr. at 11. However, Mr. Wechselberger’s rationale for all three is again based upon the accused TVs including additional unclaimed components. With respect to the error corrector limitation, Mr. Wechselberger contends it is not met because the accused error corrector for these claims, the Reed-Solomon decoder, does not receive the digital information “*directly*” from the demodulator because “there are signal processing blocks between the output and demodulator and the input of the Reed-Solomon decoder ... in particular, there’s this trellis decoder and followed by the data de-interleaver.” 4/11/2013 A.M. Trial Tr. at 127:2-23. For the two expander limitations, his opinion is the same as expressed for the claim 7 of the ‘310 Patent, namely that the video and audio expanders do not receive signals from the accused Reed-Solomon error corrector because of the presence of intervening components (*i.e.*, derandomizer and demultiplexer). 4/11/2013 P.M. Trial Tr. at 11.

Again, the claims do not require the error corrector to be “directly” connected to the demodulator or the expanders to be “directly” connected to the Reed-Solomon error corrector.

Mr. Wechselberger's opinion is improperly predicated on the fact that the accused TVs include additional unclaimed elements. Further, his notions about there being a different "signal" after each stage of signal processing is irrelevant to the '375 Patent, because claims 26 and 30 do not require a "signal" at all. Instead, they broadly claim "digital information," which is defined in claims 25 and 29 as simply including video, audio, and error correction information. PTX-0003. The claimed expanders are merely required to expand the video and audio portions of this digital information. *Id.* Mr. Wechselberger did not testify that the video and audio information input to the expanders was different than the video and audio information that was received and error corrected. To the contrary, Mr. Wechselberger admitted that the video and audio information is necessarily present after each stage of signal processing. *See, e.g.*, 4/11/2013 P.M. Trial Tr. at 63:5-18, 64:17-25 (received signal and the signal input to the expanders include video and audio and at each point in the processing chain there will be a representation of that audio and video information). *See also* 4/11/2013 A.M. Trial Tr. at 96:6-10 ("... the receiver is in A54 [DX-035 at Figure 9.1]. Once again, off the tuner, you can see ***the information***, and ***it*** flows through a number of steps on its way to being constructed into a picture.").

Claim 30 of the '375 Patent is explicitly clear that the error corrector need not be directly connected to the demodulator and that the expanders need not be directly connected to the error corrector, as Mr. Wechselberger contends. More particularly, the error corrector is explicitly described as being configured to correct an error of "a digital information which is ***previously*** demodulated by the demodulator," and the expanders are similarly described as expanding "digital information which is ***previously*** error corrected." As the ordinary meaning of "previously" simply requires the demodulation to occur sometime before error correction, and error correction to occur sometime prior to expansion, it is clear that intervening processing



operations are permitted on the received digital information so long as the claimed temporal order is maintained. Mr. Wechselberger never disputed that this claimed order is performed by the accused ATSC TVs. 4/11/2013 P.M. Trial Tr. at 70:19-25.

In view of the foregoing, it is clear that Mr. Wechselberger's non-infringement arguments are legally flawed and irrelevant to claims 26 and 30. Thus, Hitachi's JMOL should be granted.

**D. TPV's Relied On Irrelevant Arguments Designed To Confuse The Jury**

At trial, Mr. Wechselberger engaged in an irrelevant sideshow in which he asserted that if one removed the unclaimed deinterleaver, Reed-Solomon decoder, derandomizer, and demultiplexer elements from the accused ATSC TVs and instead connected the output of the trellis decoder "directly" to the input of the bit-expanders, then the accused TVs "won't work." 4/11/2013 A.M. Trial Tr. at 119:19-120:6. *See also* 4/12/2013 P.M. Trial Tr. at 89:20-90:7 (closing – Hitachi's own witness admitted they "would not work"). This was a cynical attempt to escape a verdict of non-infringement by confusing the jury. A proper infringement analysis requires matching each claim element to a structure in the accused product; not vice versa. Mr. Wechselberger's backwards analysis is irrelevant because it ignores the open-ended nature of a "comprising" claim, which can be infringed even when there are also unclaimed elements in the accused structure. The corollary is that not all structural elements in the accused product need to have a corresponding claim element. Hence, whether an accused TV might not work if it lacks unclaimed elements is irrelevant. Indeed, the Federal Circuit has squarely rejected Mr. Wechselberger's approach and noted that such a "view would stand the law of infringement on its head, and would fatally undermine the long-established legal principle that non-infringement is shown when an element or step in the claims is missing from the accused product or process, not vice-versa." *Amstar Corp. v. Envirotech Corp.*, 730 F.2d 1476, 1484 (Fed. Cir. 1984).

Additionally, TPV repeatedly implied to the jury that the asserted claims were limited to

video tape recorders (VTRs). *See, e.g.*, 4/8/2013 A.M. Trial Tr. at 76:2-3 (opening statement – “videotape recorder patents”); 4/9/2013 P.M. Trial Tr. at 58:5-24, 63:10-64:1 (cross of Mr. Hamilton – all figures are VTRs); 4/11/2013 A.M. Trial Tr. at 108:4-109:12, 112:20-113:14 (direct of Mr. Wechselberger – all patent figures are about VTRs – “There’s no suggestion it’s applicable to a television signal or even a hint”); 4/12/2013 P.M. Trial Tr. at 88:21-89:8 (closing – patents are about “recording” which TVs do not use). Of course, there is nothing in the claims or the Court’s construction justifying TPV’s relentless attempts to limit the patents to VTRs or exclude TVs. Indeed, claims 25 and 30 explicitly recite that there is “no recording process.”

Finally, TPV attempted to taint the jury’s infringement deliberations by injecting DigiCipher into Hitachi’s case-in-chief on infringement even though DigiCipher had no relevance to infringement and was far beyond the scope of Mr. Hamilton’s direct testimony. *See* 4/9/2013 P.M. Trial Tr. at 30-34, 40-41. In this regard, Hitachi incorporates by reference its position concerning the irrelevance and prejudicial nature of the DigiCipher reference as articulated in Hitachi’s other JMOL and new trial motions being filed concurrently herewith.

The foregoing efforts to confuse the jury with irrelevancies, combined with the legally flawed nature of Mr. Wechselberger’s non-infringement arguments, are indicative that the verdict is against the weight of the relevant evidence and a new trial, if not JMOL, is warranted. *See, e.g., Verdegaal Brothers v. Union oil Co. of Cal.*, 814 F.2d 628, 633 n.5 (Fed. Cir. 1987) (making irrelevant argument as to whether reference qualified as prior art to confuse jury on validity question would be grounds for new trial).

## **V. CONCLUSION**

In view of the foregoing, no reasonable jury could have found that the accused ATSC TVs did not infringe the asserted claims of the ’310 and ’375 Patents. Therefore, the Court should grant Hitachi’s JMOL motion or alternatively grant a new trial.

Respectfully submitted,

Dated: May 13, 2013

/s/ Jeffrey B. Plies

Martin J. Black

[martin.black@dechert.com](mailto:martin.black@dechert.com)

Dechert LLP

Cira Centre

2929 Arch Street

Philadelphia, PA 19104

(215) 994-4000

Jeffrey B. Plies (State Bar No. 24027621)

[Jeff.Plies@dechert.com](mailto:Jeff.Plies@dechert.com)

Stephen R. Dartt (State Bar No. 24042370)

[Stephen.Dartt@dechert.com](mailto:Stephen.Dartt@dechert.com)

DECHERT LLP

300 W. 6th Street

Suite 2010

Austin, TX 78701

(512) 394-3000

*Attorneys for Plaintiffs Hitachi Consumer  
Electronics Co., Ltd. and Hitachi Advanced Digital,  
Inc.*

**OF COUNSEL:**

Otis W. Carroll

Texas Bar No. 03895700

Patrick Kelley

Texas Bar No. 11202500

IRELAND, CARROLL & KELLEY, P.C.

6101 South Broadway, Suite 500

Tyler, TX 75703

(903) 561-1600

(903) 581-1071 (fax)

[nancy@icklawn.com](mailto:nancy@icklawn.com)

[patkelley@icklawn.com](mailto:patkelley@icklawn.com)

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on May 13, 2013.

/s/ Jeffrey B. Plies

Jeffrey B. Plies